

SEQUENCE LISTING

<110> Costa, Robert Wang, Xinhe Tan, Yongjun Kalinichenko, Vladimir Krupczak-Hollis, Katherine Wang, I-Ching Major, Michael <120> METHODS OF TREATING AGE-RELATED DEFECTS AND DISEASES <130> 02-1040-A <140> 10/650,609 2003-08-28 <141> <150> 60/406582 <151> 2002-08-28 <150> 60/426068 2002-11-13 <151> <160> 3 <170> PatentIn version 3.0 <210> <211> 2737 <212> DNA <213> Homo sapiens <400> 1 ggagecegga geeegeette ggagetaegg cetaaeggeg geggegaetg eagtetggag 60 ggtccacact tgtgattctc aatggagagt gaaaacgcag attcataatg aaaactagcc 120 cccgtcggcc actgattctc aaaagacgga ggctgcccct tcctgttcaa aatgccccaa 180 gtgaaacatc agaggaggaa cctaagagat cccctgccca acaggagtct aatcaagcag 240 aggcctccaa ggaagtggca gagtccaact cttgcaagtt tccagctggg atcaagatta 300 ttaaccaccc caccatgccc aacacgcaag tagtggccat ccccaacaat gctaatattc 360 acagcatcat cacagcactg actgccaagg gaaaagagag tggcagtagt gggcccaaca 420 aattcatcct catcagctgt gggggagccc caactcagcc tccaggactc cggcctcaaa 480 cccaaaccag ctatgatgcc aaaaggacag aagtgaccct ggagaccttg ggaccaaaac 540 ctgcagctag ggatgtgaat cttcctagac cacctggagc cctttgcgag cagaaacggg 600 agacctgtgc agatggtgag gcagcaggct gcactatcaa caatagccta tccaacatcc 660 agtggcttcg aaagatgagt tctgatggac tgggctcccg cagcatcaag caagagatgg 720

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Lys Arg Ser Pro Ala Gln Gln Glu Ser Asn Gln Ala Glu Ala Ser Lys 35 40 45

Glu Val Ala Glu Ser Asn Ser Cys Lys Phe Pro Ala Gly Ile Lys Ile 50 55 60

Ile Asn His Pro Thr Met Pro Asn Thr Gln Val Val Ala Ile Pro Asn 65 70 75 80

Asn Ala Asn Ile His Ser Ile Ile Thr Ala Leu Thr Ala Lys Gly Lys 85 90 95

Glu Ser Gly Ser Ser Gly Pro Asn Lys Phe Ile Leu Ile Ser Cys Gly
100 105 110

Gly Ala Pro Thr Gln Pro Pro Gly Leu Arg Pro Gln Thr Gln Thr Ser 115 120 125

Tyr Asp Ala Lys Arg Thr Glu Val Thr Leu Glu Thr Leu Gly Pro Lys 130 135 140

Pro Ala Ala Arg Asp Val Asn Leu Pro Arg Pro Pro Gly Ala Leu Cys 145 150 155 160

Glu Gln Lys Arg Glu Thr Cys Ala Asp Gly Glu Ala Ala Gly Cys Thr 165 170 175

Ile Asn Asn Ser Leu Ser Asn Ile Gln Trp Leu Arg Lys Met Ser Ser 180 185 190

Asp Gly Leu Gly Ser Arg Ser Ile Lys Gln Glu Met Glu Glu Lys Glu
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Asn Cys His Leu Glu Gln Arg Gln Val Lys Val Glu Glu Pro Ser Arg 215 220 Pro Ser Ala Ser Trp Gln Asn Ser Val Ser Glu Arg Pro Pro Tyr Ser 230 235 Tyr Met Ala Met Ile Gln Phe Ala Ile Asn Ser Thr Glu Arg Lys Arg 245 250 Met Thr Leu Lys Asp Ile Tyr Thr Trp Ile Glu Asp His Phe Pro Tyr 265 260 Phe Lys His Ile Ala Lys Pro Gly Trp Lys Asn Ser Ile Arg His Asn 280 Leu Ser Leu His Asp Met Phe Val Arg Glu Thr Ser Ala Asn Gly Lys 295 Val Ser Phe Trp Thr Ile His Pro Ser Ala Asn Arg Tyr Leu Thr Leu 310 315 Asp Gln Val Phe Lys Gln Gln Lys Arg Pro Asn Pro Glu Leu Arg Arg 330 Asn Met Thr Ile Lys Thr Glu Leu Pro Leu Gly Ala Arg Arg Lys Met Lys Pro Leu Leu Pro Arg Val Ser Ser Tyr Leu Val Pro Ile Gln Phe 360 Pro Val Asn Gln Ser Leu Val Leu Gln Pro Ser Val Lys Val Pro Leu 370 375 Pro Leu Ala Ala Ser Leu Met Ser Ser Glu Leu Ala Arg His Ser Lys 390 395 Arg Val Arg Ile Ala Pro Lys Val Leu Leu Ala Glu Glu Gly Ile Ala 410 Pro Leu Ser Ser Ala Gly Pro Gly Lys Glu Glu Lys Leu Leu Phe Gly Glu Gly Phe Ser Pro Leu Leu Pro Val Gln Thr Ile Lys Glu Glu Glu 440 Ile Gln Pro Gly Glu Glu Met Pro His Leu Ala Arg Pro Ile Lys Val 450 455 Glu Ser Pro Pro Leu Glu Glu Trp Pro Ser Pro Ala Pro Ser Phe Lys 470 Glu Glu Ser Ser His Ser Trp Glu Asp Ser Ser Gln Ser Pro Thr Pro 490 Arg Pro Lys Lys Ser Tyr Ser Gly Leu Arg Ser Pro Thr Arg Cys Val

505

500

Ser Glu Met Leu Val Ile Gln His Arg Glu Arg Arg Glu Arg Ser Arg 515 520 525

Ser Arg Arg Lys Gln His Leu Leu Pro Pro Cys Val Asp Glu Pro Glu 530 540

Leu Leu Phe Ser Glu Gly Pro Ser Thr Ser Arg Trp Ala Ala Glu Leu 545 550 555 560

Pro Phe Pro Ala Asp Ser Ser Asp Pro Ala Ser Gln Leu Ser Tyr Ser 565 570 575

Gln Glu Val Gly Gly Pro Phe Lys Thr Pro Ile Lys Glu Thr Leu Pro 580 585 590

Ile Ser Ser Thr Pro Ser Lys Ser Val Leu Pro Arg Thr Pro Glu Ser 595 600 605

Trp Arg Leu Thr Pro Pro Ala Lys Val Gly Gly Leu Asp Phe Ser Pro 610 620

Val Gln Thr Ser Gln Gly Ala Ser Asp Pro Leu Pro Asp Pro Leu Gly 625 630 635 640

Leu Met Asp Leu Ser Thr Thr Pro Leu Gln Ser Ala Pro Pro Leu Glu 645 650 655

Ser Pro Gln Arg Leu Leu Ser Ser Glu Pro Leu Asp Leu Ile Ser Val 660 665 670

Pro Phe Gly Asn Ser Ser Pro Ser Asp Ile Asp Val Pro Lys Pro Gly 675 680 685

Ser Pro Glu Pro Gln Val Ser Gly Leu Ala Ala Asn Arg Ser Leu Thr 690 695 700

Glu Gly Leu Val Leu Asp Thr Met Asn Asp Ser Leu Ser Lys Ile Leu 705 710 715 720

Leu Asp Ile Ser Phe Pro Gly Leu Asp Glu Asp Pro Leu Gly Pro Asp 725 730 735

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aauaaa